



City of Burbank - COMMUNITY DEVELOPMENT DEPARTMENT
BUILDING DIVISION
Permit Requirements:
LOW-RISE RESIDENTIAL REROOFS

PERMIT APPLICATION REQUIREMENTS: Roof recovering of an existing low-rise residential building must meet the following energy and inspection requirements. For **hotel/motel** requirements, see the separate handout for nonresidential, high-rise residential and hotels/motels buildings.

1. ENERGY REQUIREMENTS: If the reroof job meets the following criteria, a Certificate of Compliance shall be submitted with the permit application **and** the project shall comply with either the Prescriptive **or** the Performance Approach detailed below.

- More than 50 percent of the roof OR more than 1,000 square feet of roof is being replaced, and
- The roof has a slope greater than 2:12 (9.5 degrees from the horizontal), and
- The roof covering has a density of five pounds per square foot or more. This generally includes concrete, clay tiles, slate and possibly some synthetic roof coverings, but the weight of the product being installed must be verified.

Prescriptive Approach. Roof covering products shall meet the following requirements:

1. Be CRRC certified and have a label that lists the emittance and the initial and 3-year aged reflectances
2. Shall meet the minimum requirements in either a, b, or c below:
 - a. Minimum Aged Solar Reflectance = 0.15 and Minimum Thermal Emittance = 0.75 or
 - b. Minimum Solar Reflectance Index = 10 or
 - c. One of these Alternatives:
 - 1) Add insulation with a thermal resistance of at least 0.85 hr·ft²·°F/Btu or at least a 3/4 inch air-space is added to the roof deck over an attic; or
 - 2) Existing ducts in the attic are insulated and sealed according to Section 151(f)10; or
 - 3) Building has at least R-30 ceiling insulation; or
 - 4) Building has a radiant barrier in the attic meeting the requirements of Section 151(f)2; or
 - 5) Building has no ducts in the attic.

Performance Approach. The computer-generated report indicating the following shall be submitted with the application.

1. A roofing product's thermal emittance and 3-year aged solar reflectance shall be certified and labeled. If the product is not certified, it shall be assumed to following default aged reflectance/emittance values.
 - Asphalt shingles = 0.08/0.75
 - All other roofing products = 0.10/0.75
 - 3-year aged value shall be derived from the equation $R_{aged} = [0.2 + 0.7[p_{initial} - 0.2]]$, where $p_{initial}$ = the initial SRI
 - SRI (Solar Reflectance Index) may be used as an alternative to thermal emittance and 3-year aged solar reflectance. It shall be based on wind velocity of 2-6 meters per second, and calculated based on the 3-year aged reflectance value of the roofing product
2. When altered components do **not** meet the requirements specified in (1) directly above, the standard energy budget shall be based on the minimum requirements listed in the Prescriptive Approach.
3. When the altered components do meet the Prescriptive Approach minimum requirements under A, then the standard energy budget shall be based on existing conditions.

2. INSPECTION: The permit holder must arrange for the following inspections.

1. Roof Sheathing
 - The roof sheathing shall be inspected after installation but before application of roof paper to verify boundary and field nailing to the framing. Nail heads shall be flush with the surface of the plywood and not overdriven.
 - If an Alternative is being used to meet Prescriptive requirements, please make arrangements for an interior inspection of the attic to verify the presence of insulation, ducting, radiant barrier or other qualifying alternate method of compliance.
2. Final Inspection – A final inspection is required to verify that roof shingles and flashing have been installed according to code and energy requirements. In order to be valid, the permit must be finalized.

NOTES: 1. A repair is replacement of no more than one roof square, or 100 square feet, of roof covering.